

Notice of Allowability

Application No.

09/821,600

Applicant(s)

BROWN ET AL.

Examiner

Michael J. Moore, Jr.

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/24/2005.
2. ☒ The allowed claim(s) is/are 1-30.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/24/2005 has been entered.

Allowable Subject Matter

2. Claims **1-30** are allowed.

3. The following is an examiner's statement of reasons for allowance:

Regarding claim **1**, *Leano et al.* (U.S. 6,453,472) teaches an upstream transmission power control method where the upstream transmission power of a cable modem is regulated by a comparison of the upstream transmission power and an adjusted power level by a headend. After this comparison is performed, the headend instructs the cable modem to make a power level adjustment.

Leano et al. does not teach the cable modem retrieving a communication parameter value from memory, comparing this value with a predetermined threshold to identify a potential link impairment, and then periodically sending a message to the headend indicating that a system adjustment is necessary in response to the comparison.

Regarding claims **2-12**, these claims are further limiting to claim **1** and are thus also allowable over the prior art of record.

Regarding claim **13**, *Leano et al.* (U.S. 6,453,472) teaches an upstream transmission power control method where the upstream transmission power of a cable modem is regulated by a comparison of the upstream transmission power and an adjusted power level by a headend. After this comparison is performed, the headend instructs the cable modem to make a power level adjustment.

Leano et al. does not teach the cable modem retrieving a communication parameter value from memory, comparing this value with a predetermined threshold to identify a potential link impairment, and then periodically sending a message including the value to the headend that indicates that a system adjustment is necessary in response to the comparison.

Regarding claims **14 and 15**, these claims are further limiting to claim **13** and are thus also allowable over the prior art of record.

Regarding claim **16**, *Leano et al.* (U.S. 6,453,472) teaches an upstream transmission power control method where the upstream transmission power of a cable modem is regulated by a comparison of the upstream transmission power and an adjusted power level by a headend. After this comparison is performed, the headend instructs the cable modem to make a power level adjustment.

Leano et al. does not teach the cable modem retrieving a transmission power level value from memory, comparing this value with a predetermined threshold to identify a potential link impairment, and then periodically sending a message including the value to the headend that indicates that a system adjustment is necessary in response to the comparison.

Regarding claim **17**, this claim is further limiting to claim **16** and is thus also allowable over the prior art of record.

Regarding claim **18**, *Leano et al.* (U.S. 6,453,472) teaches an upstream transmission power control method where the upstream transmission power of a cable modem is regulated by a comparison of the upstream transmission power and an adjusted power level by a headend. After this comparison is performed, the headend instructs the cable modem to make a power level adjustment.

Leano et al. does not teach the cable modem retrieving a communication parameter value from memory, comparing this value with a predetermined threshold to identify a potential link impairment, and then periodically sending a message to the headend indicating that a system adjustment is necessary in response to the comparison.

Regarding claims **19-29**, these claims are further limiting to claim **18** and are thus also allowable over the prior art of record.

Regarding claim **30**, *Leano et al.* (U.S. 6,453,472) teaches an upstream transmission power control method where the upstream transmission power of a cable modem is regulated by a comparison of the upstream transmission power and an adjusted power level by a headend. After this comparison is performed, the headend instructs the cable modem to make a power level adjustment.

Leano et al. does not teach the cable modem retrieving a transmission power level value from memory, comparing this value with a predetermined threshold to identify a potential link impairment, and then periodically sending a message to the

headend indicating that a system adjustment is necessary in response to the comparison.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Vogel (U.S. 6,785,292), Burke et al. (U.S. 6,233,235), Cooper et al. (U.S. 6,772,437), Roeck et al. (U.S. 6,877,166), and Weinstock et al. (U.S. 6,400,863) are other references relevant to this application.

Vogel et al. (U.S. 6,785,292) teaches a method for detecting a source RF impairment in a data-over-cable system where a CMTS within a headend monitors the SNR of various cable modems and identifies the source of RF impairment.

Vogel et al. does not teach monitoring of upstream transmission power by the cable modem and the sending of messages to the headend indicating a system adjustment is necessary in response to a power level comparison made by the cable modem.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Moore, Jr. whose telephone number is (571) 272-3168. The examiner can normally be reached on Monday-Friday (8:30am - 5:00pm).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached at (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael J. Moore, Jr.
Examiner
Art Unit 2666

mjm MM

Seema S. Rao
SEEMA S. RAO 1/9/06
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600